



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/681,068

10/07/2003

Andrew S. Hildebrant

10030549-1

8619

63448

7590

07/12/2010

Gregory W. Osterloth  
Holland & Hart, LLP  
P.O. Box 8749  
Denver, CO 80201

EXAMINER

LEIVA, FRANK M

ART UNIT

PAPER NUMBER

3714

MAIL DATE

DELIVERY MODE

07/12/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## **COMMENTS**

### ***Additional comments***

1. Pre appeal Brief conference decision to forward the appeal to the board.
2. Clarification of terminology used in the application versus the reference:

Determination of required memory (claim 1) is located in Agrawal column 5 lines 12-36, where after simulating executing the test vector the system counts the flip-flops (or memory units) that remained unknown, or in simple terms calculating the memory not used. Total memory minus unknown memory equals required memory to execute the test vector.

Using the required memory to estimate the cost; Agrawal column 4 lines 50-52, chooses the cost function to equal the number of flip-flops (or memory units) that remain in the unknown state, thus, using the total memory minus the required memory to calculate the cost.

### ***Examiner's note***

3. It is the examiner's position that the Agrawal reference not only simulates execution of a tests vector and calculates the cost of executing it, but reduces the overall cost of testing the circuit by continually running trial tests vectors to find the most efficient vector.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK M. LEIVA whose telephone number is (571)272-2460. The examiner can normally be reached on M-Th 9:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FML  
07/08/2010